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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,318	07/10/2003	Thomas David Zounes	02-LJ-060	1317

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EXAMINER	
PERALTA, GINETTE	

ART UNIT	PAPER NUMBER
2814	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H·A

Office Action Summary	Application No.	Applicant(s)	
	10/604,318	ZOUNES, THOMAS DAVID	
	Examiner	Art Unit	
	Ginette Peralta	2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) *34-37* is/are withdrawn from consideration.

5)☒ Claim(s) *1-26* is/are allowed.

6)☒ Claim(s) *27-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/10/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-33 in the reply filed on 11/3/04 is acknowledged.

2. Claims 34-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/3/04.

Drawings

3. The drawings are objected to because in the circuit diagram of Fig. 1d the feature of a three input NAND logic function is not illustrated, although it is shown in the structural drawing and is described in ¶[0036] of the specification, and in Figs. 4 and 5, the reference numbers 24,26,28 do not correspond to the item 30 as described in the specification, items 24, 26, and 28 should be renumbered as 32,34, and 36, respectively as shown in Fig. 1C. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered

and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 27-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Essbaum et al. (U. S. Pat. 5,814,846).

Regarding claim 27, Essbaum et al. discloses in Fig. 2 a cell library that comprises a plurality of selectable inverting NMOS logic circuits (item 34 of Fig. 1, col. 3, lines 59-61, and in col. 4, lines 58-63); and a plurality of selectable inverter circuits (item 18 of Fig. 1), connectable to receive at least one output from a selected NMOS logic circuit.

Regarding claim 28, Essbaum et al. discloses a cell library wherein at least one of the inverter circuits 18 has a plurality of inputs to which outputs of a corresponding plurality of the logic circuits 34 are selectively connectable, as shown in Fig. 1.

Regarding claim 29, Essbaum et al. discloses that at least one of the NMOS logic circuits has an "AND" function in col. 3, lines 59-61.

Regarding claim 30, Essbaum et al. discloses that at least one of the NMOS logic circuits has an "OR" function in col. 3, lines 59-61.

Regarding claim 31, Essbaum et al. discloses that at least one of the NMOS logic circuits has a complex logic function including "AO" (AND/OR) or "OA" (OR/AND) functions in col. 3, lines 59-61.

Regarding claim 32, Essbaum et al. discloses that a weak p-feedback transistor may be added to the circuit at the inverter region as shown in Fig. 1, and this would result in the inverter circuit being configured as a keeper circuit that is connected to the NMOS logic circuit 34.

Regarding claim 33, Essbaum et al. discloses that the keeper circuit comprises a pair of PMOS devices (items 16 and 20 of Fig. 1) and an NMOS device (item 22 of Fig. 1); the NMOS device 22 and one of the PMOS devices (20) being connected to form an inverter circuit connectable to an output of the NMOS logic circuit 34; and another of the PMOS devices (16) being connected to receive an output of the inverter circuit and connectable to the output of the NMOS logic circuit 34 to latch an existing state therein (col. 4, lines 17-23)

Allowable Subject Matter

6. Claims 1-26 are allowed.

The primary reason for the allowance of the claims 1-15 is the inclusion of the feature of a cell library for use in designing integrated domino logic circuits that comprises a first library portion including a plurality of FET logic circuits to provide at least selectable transistor sizes, and a second library portion that includes a plurality of selectable prechargeable complementary FET driver circuits, each configured to be connectable to an output of the selected logic circuit, to provide at least selectable transistor sizes which is not anticipated nor rendered obvious over the prior art hereby made of record.

The primary reason for the allowance of the claims 16-26 is the inclusion of the feature of a cell library for use in designing integrated circuits that comprises a first library portion including a plurality of NMOS logic circuits to provide selectable logic functions and transistor sizes, and a second library portion that includes a plurality of selectable driver circuits, each configured to be connectable to an output of the selected logic circuit, the driver circuit selectable to match at least the size characteristic of the selected logic circuit which is not anticipated nor rendered obvious over the prior art of record

The prior art includes Kawabe et al. (US Pat. Pub. 2002/0099989 A1), which discloses a cell library for use in designing logic circuits, and that includes determining the leakage current of a determined circuit and assigning the cell depending the input

signals generated as determined by the leakage current, but does not disclose a first portion having a plurality of FET logic circuit with a selectable size, and a second portion including a prechargeable complementary FET driver circuit that provides selectable transistor sizes. The prior art further includes Chen (U. S. Pat. 6,711,720 B2), which discloses a library of gates that are selectable based on their size to be used in logic circuits in order to optimize the power dissipation and the circuit speed of the integrated circuit.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,785,875 B2	Beerel et al.	8/31/04
US 2002/0144223 A1	Usami et al.	10/3/02

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ginette Peralta whose telephone number is (571) 272-1713. The examiner can normally be reached on Monday to Friday 8:00 AM- 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GP

Douglas A. Wille

DOUGLAS WILLE
PRIMARY EXAMINER